



US005443722A

United States Patent [19]

Desai et al.

[11] Patent Number: **5,443,722**[45] Date of Patent: **Aug. 22, 1995**[54] **DUPLEX STRAINER**

4,921,598 5/1990 Desch 210/340

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N.C.*Attorney, Agent, or Firm*—Stroock & Stroock & Lavan[21] Appl. No.: **252,092**[57] **ABSTRACT**[22] Filed: **Jun. 1, 1994**[51] Int. Cl.⁶ **B01D 29/27**[52] U.S. Cl. **210/253; 210/340;**
210/420; 210/452; 210/470; 137/625.21;
137/625.43; 55/343; 55/344; 55/484[58] Field of Search **137/597, 624.13, 625,**
137/625.15, 625.17, 625.21, 625.43, 625.46;
55/343, 344, 484; 210/253, 335, 340, 341, 405,
418, 420, 421, 422, 424, 448, 452, 470[56] **References Cited****U.S. PATENT DOCUMENTS**

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A duplex strainer for straining material includes a housing, housing inlet port through which material enters the housing under pressure for straining and an outlet port through which strained material exits the housing. The housing includes a first strainer chamber having the first and second ports in separate fluid communication with the housing. A second strainer chamber includes third and fourth ports in separate fluid communication with the housing. The first port opposes the third port and the second port opposes the fourth port. A valve control structure includes a first three-way ball valve disposed within the housing for controlling fluid flow between the first port, third port and the housing. A second three-way ball valve is disposed within the housing to control fluid flow between the housing, second port and fourth port.

6 Claims, 4 Drawing Sheets